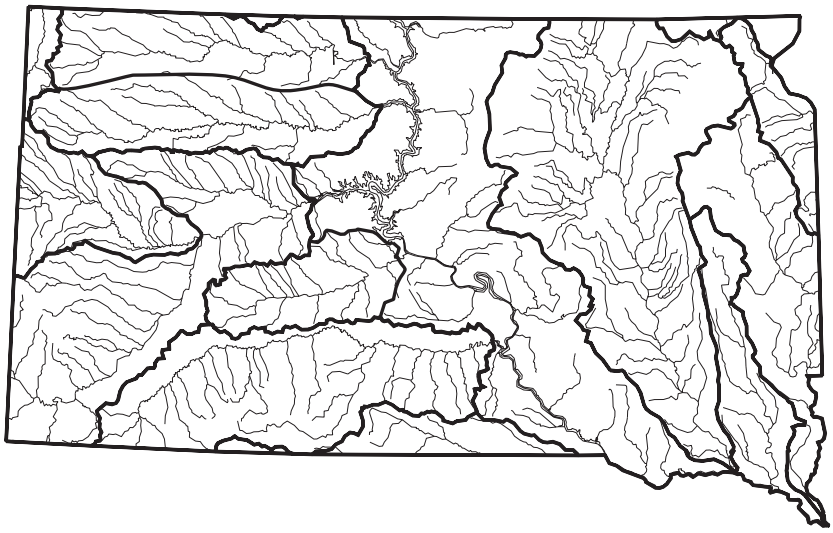
South Dakota



Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the South Dakota 1996 305(b) report, contact:

Andrew Repsys
South Dakota Department of Environment and Natural Resources
Division of Financial and Technical Assistance
Watershed Protection Program
523 East Capitol, Joe Foss Building
Pierre, SD 57501-3181
(605) 773-3882
e-mail: andrewr@denr.state.sd.us

Surface Water Quality

Seventeen percent of South Dakota's surveyed rivers and streams fully support aquatic life uses and 83% do not fully support aquatic life uses. Forty-three percent of the surveyed rivers also support swimming, and 57% of the surveyed rivers do not fully support swimming. The most common pollutants impacting South Dakota streams are suspended solids due to water erosion from croplands, gully erosion from rangelands, streambank erosion, and other natural forms of erosion. Eighty percent of South Dakota's surveyed lake acres fully support aquatic life uses now, but the quality of these lakes is threatened. Similarly, 84% of the surveyed lake acres fully support swimming, but these waters are threatened. The most common pollutants in lakes are nutrients and sediments from agricultural runoff.

The high water conditions that prevailed in South Dakota for most of this reporting period greatly increased watershed erosion and sedimentation in lakes and streams. Suspended solids criteria were severely violated in many rivers and streams, and there was an increase in the incidence of fecal coliform bacteria in swimming areas at lakes. However, water quality improved in some lakes that experienced low water levels during 1992-1996, and high flows diluted bacteria in rivers and streams.

Ground Water Quality

Nitrates exceed EPA Maximum Contaminant Levels in more wells than any other pollutant. About 19% of the samples collected at three eastern State aquifers during 1988-1994 had nitrate concentrations that exceeded the State criteria of 10 mg/L. Potential sources of nitrate include commercial fertilizer use and manure applications. There were no violations of drinking water standards for petroleum products reported during 1994-1995, but petroleum products were involved in 76% of the spills reported during the period.

Programs to Restore Water Quality

Compliance with municipal wastewater discharge permit requirements steadily rose from 37% in 1979 to 75% statewide in 1993 following construction of 162 wastewater treatment facilities. Compliance is even higher (97%) among the plants completed with EPA Construction Grants. South Dakota relies primarily on voluntary implementation of best management practices to control pollution from nonpoint sources, such as agricultural activities, forestry operations, and mining. The State has initiated over 50 BMP development and implementation projects.

Programs to Assess Water Quality

South Dakota conducts ambient water quality monitoring at established stations, special intensive surveys, intensive fish surveys, wasteload allocation surveys, and individual nonpoint source projects. The USGS, Corps of Engineers, and U.S. Forest Service also conduct routine monitoring throughout the State. Water samples are analyzed for chemical, physical, biological, and bacteriological parameters.

Individual Use Support in South Dakota

Designated Use[a]		Percent				
		Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Poor (Not Attainable)
Rivers and Streams (Total Miles = 9,937)						
	Total Miles Surveyed					
	3,482	17	-	22	61	0
	-	-	-	-	-	-
	836	43	-	4	53	0
Lakes (Total Acres = 750,000)						
	Total Acres Surveyed					
	690,512	0	80	8	12	-
	44,912	100	0	0	0	0
	608,966	0	84	16	0	0

– Not reported in a quantifiable format or unknown.

[a] A subset of South Dakota's designated uses appear in this figure. Refer to the State's 305(b) report for a full description of the State's uses.

Note: Figures may not add to 100% due to rounding.